

Amendments to the Claims:

1-27. (canceled)

28. (currently amended) An isolated nucleic acid encoding a polypeptide having at least 80% ~~nucleic acid~~ sequence identity to:

(a) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);

(b) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;

(c) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);

(d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;~~

(e) ~~the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);~~

[[(f)] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or

[[(g)] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.

29. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 85% ~~nucleic acid~~ sequence identity to:

(a) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);

(b) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;

(c) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);

(d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;~~

~~(e)~~ — ~~the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);~~
[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.

30. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 90% ~~nucleic acid~~ sequence identity to:

- (a) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
- (c) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- ~~(d) — a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;~~
- ~~(e) — the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);~~
[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.

31. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 95% ~~nucleic acid~~ sequence identity to:

- (a) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;

(c) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);

(d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;~~

(e) ~~the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);~~

[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or

[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.

32. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 99% nucleic acid sequence identity to:

(a) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);

(b) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;

(c) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);

(d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;~~

(e) ~~the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);~~

[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or

[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.

33. (currently amended) An isolated nucleic acid comprising:
- (a) a nucleic acid sequence encoding the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140);
 - (b) a nucleic acid sequence encoding the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140), lacking its associated signal peptide;
 - (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140);
 - ~~(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;~~
 - [[~~(e)~~]] (d) the nucleic acid sequence ~~shown in Figure 83~~ (SEQ ID NO:139);
 - [[~~(f)~~]] (e) the full-length coding sequence of the nucleic acid sequence ~~shown in Figure 83~~ (SEQ ID NO:139); or
 - [[~~(g)~~]] (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 209251.
34. (currently amended) The isolated nucleic acid of Claim 33 comprising a nucleic acid sequence encoding the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140).
35. (currently amended) The isolated nucleic acid of Claim 33 comprising a nucleic acid sequence encoding the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140), lacking its associated signal peptide.
36. (currently amended) The isolated nucleic acid of Claim 33 comprising the nucleic acid sequence encoding the extracellular domain of the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140).
37. (canceled)
38. (currently amended) The isolated nucleic acid of Claim 33 comprising the nucleic acid sequence ~~shown in Figure 83~~ (SEQ ID NO:139).

39. (currently amended) The isolated nucleic acid of Claim 33 comprising the full-length coding sequence of the nucleic acid sequence ~~shown in Figure 83~~ (SEQ ID NO:139).

40. (previously presented) The isolated nucleic acid of Claim 33 comprising the full-length coding sequence of the cDNA deposited under ATCC accession number 209251.

41. (currently amended) An isolated nucleic acid that hybridizes to:

(a) a nucleic acid sequence encoding the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140);

(b) a nucleic acid sequence encoding the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140), lacking its associated signal peptide;

(c) a nucleic acid sequence encoding the extracellular domain of the polypeptide ~~shown in Figure 84~~ (SEQ ID NO:140);

~~(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;~~

[[(e)] (d) the nucleic acid sequence ~~shown in Figure 83~~ (SEQ ID NO:139);

[[(f)] (e) the full-length coding sequence of the nucleic acid sequence ~~shown in Figure 83~~ (SEQ ID NO:139); or

[[(g)] (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.

42. (canceled)

43. (previously presented) The isolated nucleic acid of Claim 41 which is at least 10 nucleotides in length.

44. (previously presented) A vector comprising the nucleic acid of Claim 28.

45. (previously presented) The vector of Claim 44, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.

46. (previously presented) A host cell comprising the vector of Claim 44.
47. (previously presented) The host cell of Claim 46, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.